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LETTER AND COMMENTS FROM FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REGARDING DRAFT SAMPLING AND ANALYSIS PLAN FOR CONFIRMATORY GROUNDWATER SAMPLING OPERABLE UNIT 11, 20 AND 21 SITES 38, 45 AND 46 REVISION 1 NAS PENSACOLA FL
4/11/2013
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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April 11, 2013

Ms. Patty Marajh-Whittemore
Remedial Project Manager
ITP Gulf Coast
Naval Facilities Engineering Command Southeast
Attn: AJAX Street, Building 135N
P.O. Box 30A
Jacksonville, FL 32212-0030

RE: Draft Sampling and Analysis Plan (Field Sampling Plan and Quality Assurance Project Plan) for Confirmatory Groundwater Sampling at Operable Units 11, 20, and 21 – Sites 38, 45, and 46, Revision 1, Naval Air Station Pensacola, Pensacola

Dear Patty:

I have reviewed the Draft Sampling and Analysis Plan (Field Sampling Plan and Quality Assurance Project Plan) for Confirmatory Groundwater Sampling at Operable Units 11, 20, and 21 – Sites 38, 45, and 46, Revision 1, Naval Air Station Pensacola, dated November 2012 (received November 2, 2012), prepared Tetra Tech, Inc. I have the following comments on the Draft SAP:

(1) On page 42, third paragraph, last sentence, it says that "Site 18 was approved for NFA by USEPA in November 2000 . . . " According to the Exit Strategy managed by the NAS Pensacola Partnering Team, EPA provided concurrence with NFA on October 2, 1996 and FDEP provided concurrence on November 9, 2000.

(2) The Confirmatory Soil Sampling Letter Report prepared by Tetra Tech NUS is not mentioned or listed as a reference. Rather, the confirmatory sampling results are attributed to the Navy PWD's Soil Removal Report, which had the Confirmatory Soil Sampling Letter Report in an appendix to the report.

(3) On page 45, first paragraph, please only refer to Marine Surface Water Cleanup Target Levels. Freshwater Surface Water Cleanup Target Levels are not appropriate to these sites.

(4) On page 47, top paragraph, last sentence, it suggests that only EPA approved NFA at Site 18. Please refer to my first comment (1).

(5) On page 47, third paragraph describing the 2006 Remedial Investigation, it alternately describes for different compounds contaminant concentrations exceeding risk-based screening criteria, Florida industrial direct exposure SCTL, or exceeding risk-based screening criteria. Please specify which risk-based screening criteria are being exceeded (i.e. residential, industrial, leachability to groundwater, etc.)

(6) On page 55, Section 10.5.1, in the description of the Nature and Extent of Contamination for OU 21 – Site 46, first paragraph, same comment as (3) above.

(7) On page 56, it says that the GCTL for aluminum is 7,000 µg/L. According to Chapter 62-777, Florida Administrative Code, the GCTL for aluminum is 200 µg/L.

(8) On page 56, please explain why manganese is not a chemical of concern for Site 46.

(9) The terms intermediate zones (page 58, top paragraph) and deep zones (page 82, second paragraph) are both used to denote the portion of the surficial aquifer that is monitored by wells installed to detect vertical gradients and potential migration of contaminants to deeper parts of the surficial aquifer. Please pick a term, intermediate or deep, and consistently use that term throughout the document.

(10) Please provide the estimated groundwater velocity for Sites 45 and 46 in Section 10.5.2. Please also provide the estimated porosity used to make the groundwater velocity calculations for all three sites.

(11) On page 60, top paragraph, in the discussion of the geology of OU 21 – Site 46, it suggests that the geology of the northern half of the site is greatly different from the southern half of the site. It is highly unlikely there would be a geological change of the magnitude described within a site the size of Site 46. Please revise this paragraph.

(12) On page 61, in the description of Migration Pathways for OU 20 – Site 45, first bullet, third sentence, it says "Depth to groundwater at the Site is approximately 13 feet bls." This is contradicted in other parts of the SAP (page 58, bottom paragraph) and by the listed shallow well depths provided in Table 17-1.

(13) In the description of ecological risks at OU 11 – Site 38 and OU 21 – Site 46 in Section 10.5.4, it says that since ecological receptors are not exposed to groundwater, ecological risks are not a concern. Please note that this is the case only if the groundwater to surface water exposure route is not complete.

(14) On page 64, Section 10.5.5, first sentence, please add "Before Hurricane Ivan" or something similar to the beginning of the sentence to identify that the uses of Building 71 and 604 being described are those uses just prior to Hurricane Ivan and the latest changes

to the uses to the site. The history of the two buildings and their uses are spelled out in Section 10.2.

(15) Figures 10-3 through 10-6 depict monitoring well locations with groundwater contaminant concentrations exceeding GCTLs for Sites 45 and 46. There is no corresponding figure showing past monitoring well locations at Site 38 with groundwater concentrations exceeding GCTLs. This is necessary to ensure the proposed replacement well locations are adequate to identify and monitor previously identified groundwater contamination at Site 38.

(16) I found the groundwater potentiometric surface map for shallow wells, taken in January 2012, depicted in Figure 10-9, to be difficult to read and verify estimated groundwater flow direction. The depiction of all wells, both existing and destroyed/abandoned, as well as wells installed deeper into the surficial aquifer, unnecessarily obscures those wells that are screened across the water table and whose water level measurements were used in calculating the groundwater flow direction depicted on the figure.

(17) On page 81, first paragraph, please change the second to last sentence to read "If any background metals concentration(s) in the hydraulically upgradient wells are determined to be greater than the default RGs in accordance with USEPA or FDEP guidance, then the background metals concentration(s) will be evaluated by the Partnering Team and may be used as the alternate RG with USEPA and EPA concurrence.

(18) On page 86, Decision Rule #1, the Department is not prepared to NFA groundwater either Site 45 or 46 based on the results of only the most recent round of groundwater sampling when both sites had identified groundwater contamination in the past. If the latest groundwater sampling at either site identifies no contamination above our criteria, the Department will work with the Navy on determining what further steps would be required to document that groundwater contamination no longer exists above groundwater cleanup target levels.

(19) On page 92, Monitoring Well Installation section, first paragraph, please rewrite the paragraph to say that replacement wells will be installed at locations where damaged or abandoned wells are located. The paragraph currently has damaged/abandoned wells being reinstalled.

(20) On page 92, Monitoring Well Installation section, second paragraph, please indicate that the bentonite pellets place above the sand pack will be hydrated.

(21) In Section 14, please put the section on the taking of water level measurements prior to section on groundwater sampling.

(22) The SAP proposes to sample for natural attenuation parameters at Site 45. As Site 45 groundwater only has metals as chemicals of concern. I feel that the analysis for natural attenuation parameters may not provide much benefit. The natural attenuation parameters listed would seem more useful for determining the natural attenuation potential for organic compounds.

(23) In Worksheet 15, on pages 100 and 101, the derivation of the Practical Quantitation Limit Goals (PQLGs) in the table is unclear. Usually, the PQLGs are calculated as one third of the PALs, but in some cases the PQLG is much higher than the PAL. See for instance, the PQLG for copper, zinc, ethylbenzene, acenaphthylene, anthracene, etc.

If you have any questions regarding this letter, please contact me at (850) 245-8997.

Sincerely,

David P. Grabka, P.G.
Remedial Project Manager
Federal Programs Section
Bureau of Waste Cleanup

KAW